

## PROJECT DESCRIPTION

## GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNALS AT THE INTERSECTIONS OF MD 201 (KENILWORTH AVENUE) AND LAWRENCE STREET AND MD 201 (KENILWORTH AVENUE) AND LLOYD STREET IN PRINCE GEORGE'S COUNTY, MARYLAND. MD 201 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

## INTERSECTION OPERATION

## MD 201 &amp; LAWRENCE STREET

THE INTERSECTION OPERATES IN A NEMA FOUR-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 201 APPROACHES OPERATING CONCURRENTLY AND THE LAWRENCE STREET APPROACHES OPERATING CONCURRENTLY.

AN ALTERNATE PEDESTRIAN PHASE IS PROVIDED ACROSS THE NORTH LEG OF MD 201 AND PEDESTRIAN INDICATIONS WILL BE PROVIDED ACROSS THE EAST LEG OF LAWRENCE STREET.

## MD 201 &amp; LLOYD STREET

THE INTERSECTION OPERATION WILL REMAIN THE SAME.

## TYPICAL MESSAGES FOR ACCESSIBLE PED SIGNALS

## MD 201 (KENILWORTH AVENUE) AND LAWRENCE STREET - NORTH LEG

## STREETS AT 90 DEGREES

WAIT: "WAIT TO CROSS KENILWORTH AT LAWRENCE. WAIT." \*

WALK: RAPID TICK

## LAWRENCE STREET AND MD 201 (KENILWORTH AVENUE) - EAST LEG

## INTERSECTION WITH ANGLED CROSSING

WAIT: "WAIT TO CROSS LAWRENCE AT KENILWORTH. CROSSWALK ANGLES LEFT. WAIT." \*\*

WALK: RAPID TICK

\* MESSAGE USED IF DISTANCE FROM NEAREST PUSHBUTTON FOR PERPENDICULAR CROSSING IS < 10'  
\*\* MESSAGE USED IF CROSSWALK DIVERGES FROM OR CONVERGES WITH PARALLEL TRAFFIC

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

## CONTROLLER REQUIREMENTS

## MD 201 &amp; LAWRENCE STREET

THE EXISTING POLE MOUNTED CABINET AND CONTROLLER WILL BE USED. THE CONTROLLER WILL BE RETROFITTED TO OPERATE APS EQUIPMENT.

## MD 201 &amp; LLOYD STREET

THE EXISTING POLE MOUNTED CABINET AND CONTROLLER WILL BE USED.

## MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAY BE USED AS DIRECTED BY THE ENGINEER.

STANDARD NO. MD-104.04-01 (SHOULDER WORK)

STANDARD NO. MD-104.02-09 (FLAGGING OPERATION)

STANDARD NO. MD-104.04-03 (LEFT LANE CLOSURE)

STANDARD NO. MD-104.02-13 (INTERSECTION FLAGGING OPERATION)

STANDARD NO. MD-104.04-05 (RIGHT LANE CLOSURE)

STANDARD NO. MD-104.04-07 (CENTER LANE CLOSURE)

## PHASE CHART

## MD 201 &amp; LAWRENCE STREET

1	2	3	4	5	6	7	8	9	10	11	12
(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)

PHASE 2 + 6	G	G	G	G	R	R	R	R	WK	WK	DW	DW
PED. CLEARANCE	G	G	G	G	R	R	R	R	FL/DW	FL/DW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	G	G	G	G	DW	DW	DW	DW
4 + 8 CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
PHASE 4 + 8 ALT	R	R	R	R	G	G	G	G	DW	DW	WK	WK
PED. CLEARANCE	R	R	R	R	G	G	G	G	DW	DW	FL/DW	FL/DW
4 + 8 ALT CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR	DARK	DARK	DARK	DARK

## MD 201 &amp; LLOYD STREET

1	2	3	4	5	6	7	8
(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)

PHASE 2 AND 6	G	G	G	G	R	R	R	R
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R
PHASE 4 + 8	R	R	R	R	G	G	G	G
4 + 8 CHANGE	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	FLY	FLY	FLY	FLY	FLR	FLR	FLR	FLR

## PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. FELECIA MURPHY  
PHONE: (301) 513-7318  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PRINCE GEORGES COUNTY

MR. VERNON STINNETT  
ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (301) 513-7305

MR. AUGIE REBISH  
DISTRICT UTILITY ENGINEER  
PHONE: (301) 513-7350

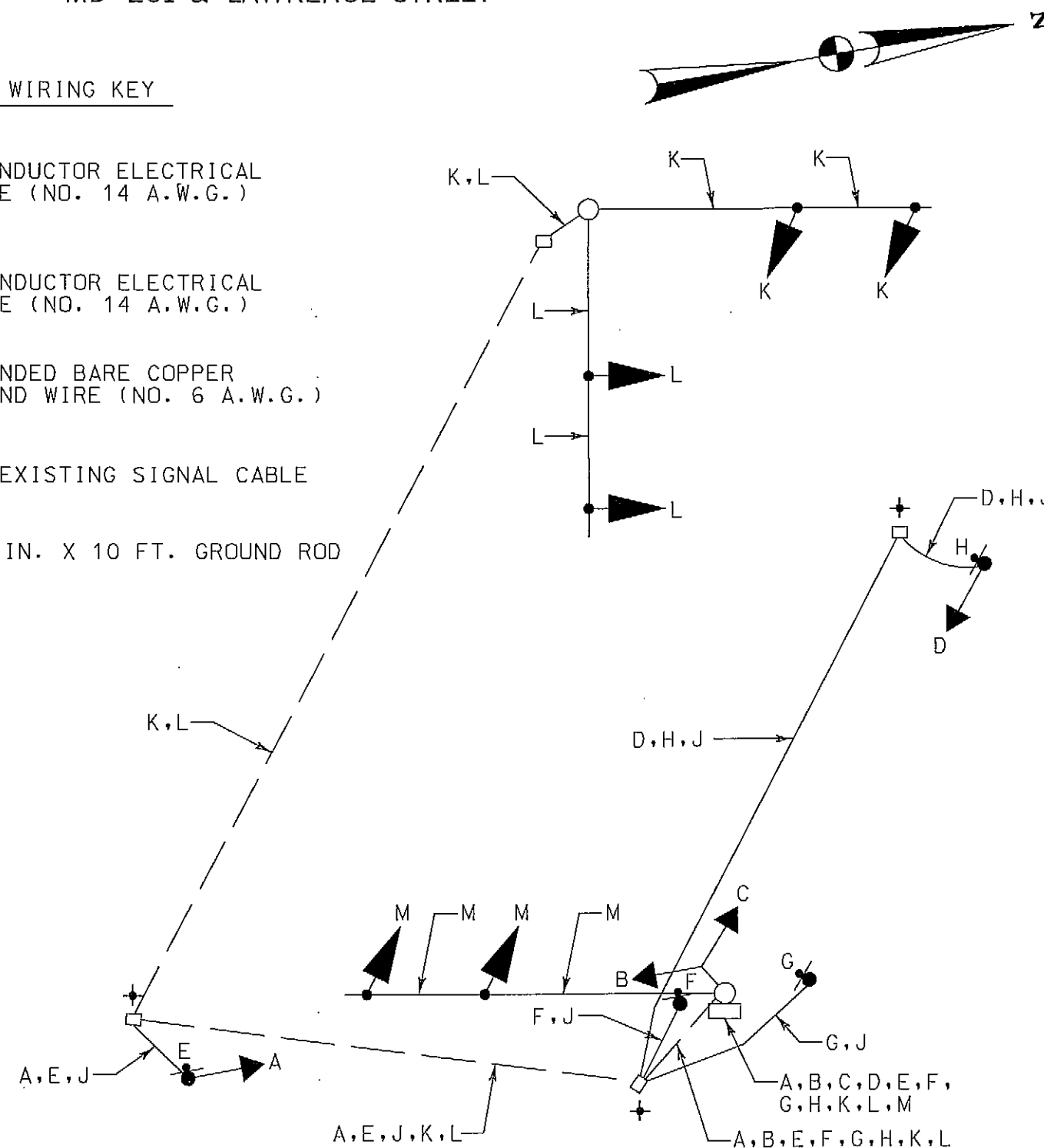
MR. RICHARD L. DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

## WIRING DIAGRAM

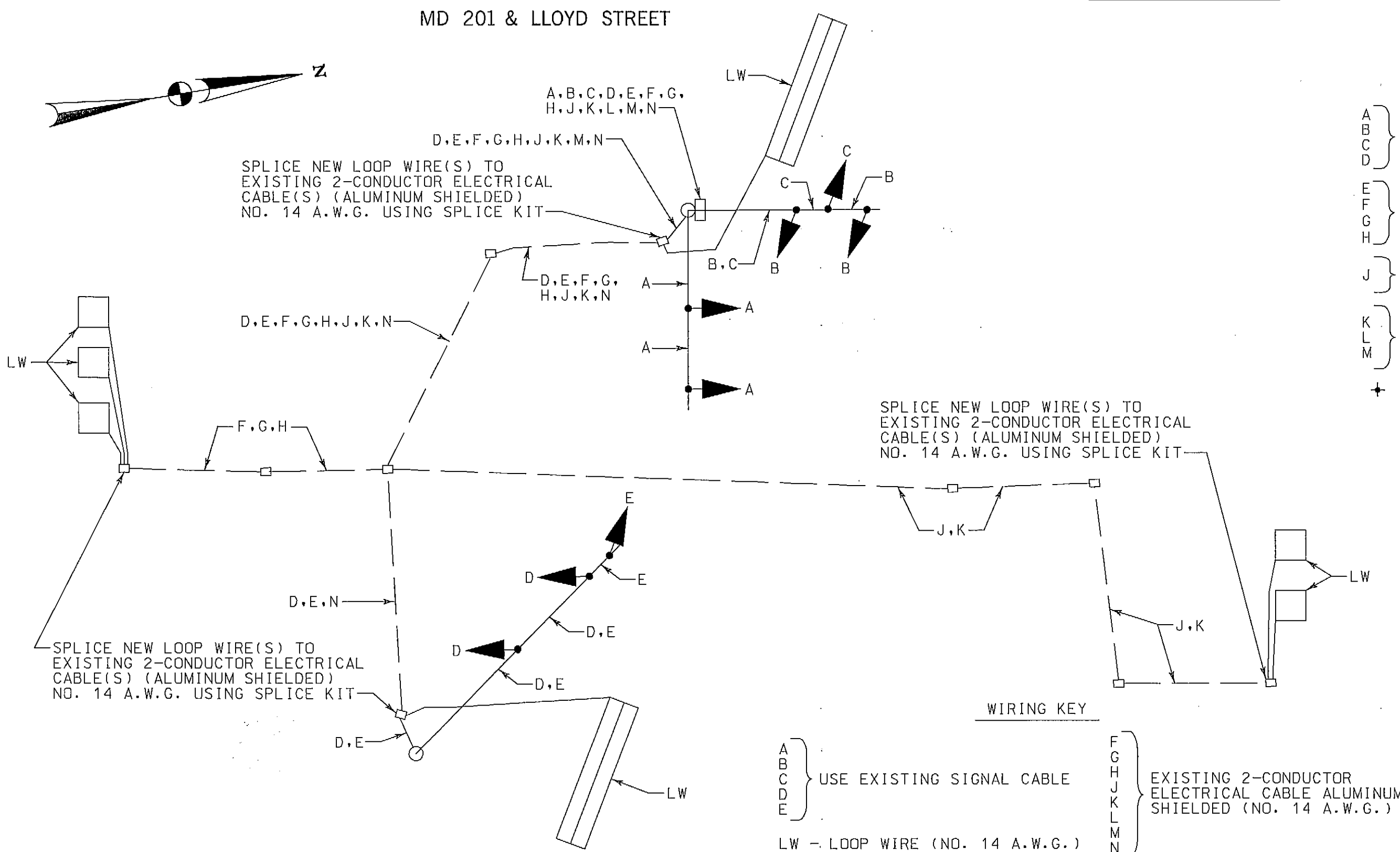
## MD 201 &amp; LAWRENCE STREET

## WIRING KEY

- A  
B  
C  
D
- 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- E  
F  
G  
H
- 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- J
- STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- K  
L  
M
- USE EXISTING SIGNAL CABLE
- + - 3/4 IN. X 10 FT. GROUND ROD



## MD 201 &amp; LLOYD STREET



## EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

CATEGORY CODES	QUANTITY	DESCRIPTION
973023	4 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF (POLE MOUNT) :
	- 2 EACH	R10-3(1) SIGN (9 IN. X 15 IN.) TO READ "PUSHBUTTON TO CROSS KENILWORTH AVENUE"
	- 2 EACH	R10-3(1) SIGN (9 IN. X 15 IN.) TO READ "PUSHBUTTON TO CROSS LAWRENCE STREET"

## EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

CATEGORY CODES	QUANTITY	DESCRIPTION
120500	1 EACH	MAINTENANCE OF TRAFFIC
203030	2 C.Y.	TEST PIT EXCAVATION
585621	135 L.F.	12 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINES
585625	125 L.F.	24 INCH HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
585700	10 L.F.	REMOVAL OF EXISTING PAVEMENT MARKING LINES, ANY WIDTH
801004	2 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
802501	295 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805135	85 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805140	25 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-TRENCHED
805155	110 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT-SLOTTED
805160	40 L.F.	1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
813015	4 S.F.	INSTALL OVERHEAD SIGN
818004	4 EACH	10 FOOT BREAKAWAY PEDESTAL POLE
837001	3 EACH	GROUND ROD - 3/4 INCH DIAMETER X 10 FOOT LENGTH
860284	42 EACH	12 IN. LED VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860290	2 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
861105	465 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
861107	365 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
862101	1710 L.F.	LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
862102	490 L.F.	SAW CUT FOR SIGNAL (LOOP DETECTOR)
800000	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT
800000	4 EACH	16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEAD
800000	4 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION
800000	1 EACH	2 WIRE CENTRAL CONTROL UNIT

## EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA

ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

SHA

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION  
MD 201 (Kenilworth Avenue) Signals  
Bladensburg, Maryland

## GENERAL INFORMATION SHEET

SCALE NONE ADVERTISED DATE 4/12/2011 CONTRACT NO. PG9375177

DESIGNED BY S. Bloss COUNTY Prince George's  
DRAWN BY S. Bloss LOGMILE  
CHECKED BY N. Leary TMS NO. K759  
F.A.P. NO. TOD NO.

TS NO. DRAWING TSP-3 OF 3 SHEET NO. 3 OF 3

WR&A  
WHITMAN, REQUARDT & ASSOCIATES, LLP  
801 South Caroline Street, Baltimore, Maryland 21231

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FILE: N:\31869-115\CADD\pSG-N003\_md201.dgn